OPTIMIST FUND

Q2 2022 Quarterly Letter

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To my fellow Optimists,

Q2 was a challenging quarter for Optimist Fund. Whether it's the war in Ukraine, surging inflation, increasing interest rates, and a potentially imminent recession, there are many topical headlines creating near term uncertainties.

% Returns	Optimist Fund*	Benchmark**
Q2	-43.8%	-21.3%
YTD	-45.0%	-19.5%

At Optimist Fund we remain wholly focused on optimizing for 5-year returns. We look at moments of market panic as opportunities to position the portfolio in a manner that will significantly benefit us over the long term. This positioning has hurt us in the short term, but we are confident our positioning will drive significant returns within the next several years.

The source of this optimism is our research. We are closely following every move of the companies we own, the capital they invest and the returns from said investments. We believe the companies in our portfolio are well positioned to become bigger, more profitable, and significantly more valuable over time, whether there is a recession in 2022, 2023 or whenever one inevitably occurs. *For those with a 5-year time horizon, this correction is a fantastic buying opportunity.*

In the current market environment macro narratives are driving large moves in stock prices, whether those narratives are rooted in sound logic or not. There are three narratives that are pervasive today that negatively impacted our portfolio in the quarter, which we believe has ultimately created an incredible investment opportunity. They are:

1. Interest rate increases disproportionally decrease growth-oriented companies' valuations relative to lower growth, mature free cash flow generative companies.

*Rates of return are for Class E series net of all fees and expenses for Optimist Fund to illustrate the historical performance of our investment strategy. **The Benchmark has a 50% weighting in the MSCI World Growth Index and a 50% weighting in the Russell Midcap Growth Index.

2. Companies that are losing money are irrationally spending and destroying shareholder value.
3. Even if a company's investments will generate attractive returns on a multi-year basis no one wants to invest in a business not generating profits.

Narrative #1 "Interest rate increases disproportionally decrease growth-oriented companies' valuation relative to lower growth mature free cash flow generative companies."

The below example is of a theoretical growth company that is burning cash every year until year 10 when they become a mature 4% growth company with mature margins.

Growth Company XYZ	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**10Y CAGR**
Sales	**$100**	**$130**	**$169**	**$220**	**$286**	**$371**	**$483**	**$627**	**$816**	**$1,060**	**$1,379**	30%
Growth		*30.0%*	*30.0%*	*30.0%*	*30.0%*	*30.0%*	*30.0%*	*30.0%*	*30.0%*	*30.0%*	*30.0%*	
Free Cash Flow	**-$25**	**-$25**	**-$25**	**-$25**	**-$25**	**-$25**	**-$25**	**-$25**	**-$25**	**-$25**	**$414**	
Margin		-19.2%	-14.8%	-11.4%	-8.8%	-6.7%	-5.2%	-4.0%	-3.1%	-2.4%	30.0%	

Cost of Equity		
Risk Free Rate	2.0%	4.0%
Equity Risk Premium	6.0%	6.0%
Beta	1.5	1.5
Cost of Equity	**11.0%**	**13.0%**

Valuation		
PV of Discrete Forecast	-$0.05	-$0.18
Terminal Value	$61.45	$47.79
Terminal FCF Growth	4.0%	4.0%
Terminal Multiple	14.29x	11.11x
PV of Terminal	$20.54	$13.24

Target Price	**$20.49**	**$13.07**	**-36.2%**

The theoretical company in the above example is worth ~$20 with a 2% risk-free rate, and ~$13 with a 4% risk-free rate, declining 36%.

As you can see as interest rates go up the present value of a company's cash flows goes down.

This is not just the case for growth companies though. This is true for the value of any cash generative investment. Below we have assessed the theoretical sensitivity a 2% increase in the risk-free rate has to a mature business.

Mature Company XYZ

Cost of Equity		
Risk Free Rate	2.0%	4.0%
Equity Risk Premium	6.0%	6.0%
Beta	1.0	1.0
Cost of Equity	**8.0%**	**10.0%**

Valuation		
Terminal FCF Growth	3.0%	3.0%
Terminal Multiple	20.00x	14.29x
2022 FCF per share	$1.55	$1.55

Target Price	$30.90	$22.07	**-28.6%**

The important takeaway is that growth-oriented companies are not materially more interest rate sensitive than mature companies. Yes -36% is a larger decline than -29% but the predominant driver of relative returns will be business fundamentals, not interest rates.

Narrative #2: "Companies that are losing money are irrationally spending and destroying shareholder value."

Over the last 7 months the view has become that if a company has negative GAAP earnings it isn't a good business. We disagree with this broad statement. The reason for our disagreement is GAAP revenues and costs aren't always reflective of the underlying profits of a company. Revenue can sometimes be understated, and whether costs are capitalized or expensed has meaningful impacts to whether a company is profitable according to generally accepted accounting principles or IFRS (two of the most common accounting standards).

For example, when Home Depot was a high growth retailer in the 80's and 90's they showed profits on their income statement but had negative free cash flow because they were reinvesting their profits into opening more stores. The investment to open a store is in inventory and the physical store itself which is capitalized as physical assets and thus not immediately expensed. The capitalization of their investment in store growth is what allowed Home Depot to have profits on their income statement while generating negative free cash flow.

Theoretically, if a store costs $100 to open and generates $20 in profit, the return on investment was 20%. Alternatively, if you expensed the $100 investment then the store lost $80 in the first year and one might say it was an unprofitable operation. The way you treat that $100 investment in the financial statements has a material difference on how the income statement looks.

Most digital oriented companies' investments are predominately expensed immediately which hides their underlying profitability and results in income statement losses.

The accounting treatment of immediately expensing investments that will accrue benefit overtime is in fact beneficial as it results in not having to pay corporate taxes. If said companies' growth costs were capitalized and amortized over 10 years, they would be profitable resulting in a tax bill. This would decrease the amount of capital they could redeploy into the business for growth and thus decrease the long-term value of the company.

For those curious to understand the details of how underlying earnings can be understated, we have provided a detailed step-by-step example in the appendix.

So, what does all this really mean for Optimist Fund? The point we are making is that current earnings for some types of businesses do not demonstrate the health or quality of the business. They will over the long term but if a company is growing rapidly, the recognition of revenue and expenses can hide the true owner's economics of the company.

Today, the market does not care about the math that we just walked you through. This has caused a significant derating in many companies that have robust underlying earnings power, but negative GAAP earnings due to either growth investments, revenue recognition, or a mix of both.

The market is penalizing companies for deploying capital at, in some cases, 50%+ IRR's (internal rates of return) because the returns don't flow through the financial statements in a way that fits the market narrative. *We have increased our exposure to businesses that have negative income statement profits and strong unit economics because it is where we believe the most attractive risk/reward is today.* Examples of said companies are Smartsheet, Wayfair and Carvana which I touch on later in the letter.

Narrative #3 "Even if a company's investments will generate attractive returns on a multi-year basis no one wants to invest in a business not generating profits."

This narrative reminds us of the energy sector in 2020 (although our businesses are significantly higher in quality than energy companies). A former colleague of mine who was invested in energy in March 2020 was getting constant pressure to sell. "Who is ever going to buy these companies", "The market is telling you energy companies aren't valuable, listen to the market", is what people would say. Evidently, that changed, and what mattered was the fundamentals of those businesses over the following years. We expect a similar rebound will play out in growth-oriented companies over the next several years.

When you compare the logic of this narrative to something other than investing in the stock market, you can then realize how illogical it is. Our comparison is investing in your own education.

Imagine someone went up to a university student today and told them to drop out immediately. They need to stop frivolously spending on these tuition payments they claim are investments in their future and get a job anywhere that will hire them today.

Before telling this student to quit university the logical question would be to ask what their expected increase in future earnings power is if they complete their degree, versus quitting and getting a job today. Does getting a degree make economic sense or not? Regardless of how good or bad the projected returns for that student's degree are, today's market environment would say to quit immediately and send an application to McDonalds.

The silver lining in all of this is that the more people quit under this short-term pressure, the less competition this student will have for higher income jobs in the future. This in fact likely increases the financial returns from his/her university degree. The same can be said for the companies we own in Optimist Fund. The companies we own will have less competition over the next few years which should drive stronger market dominance.

Let us be clear that some companies have been investing in growth that will likely never generate a satisfactory return just like some students are at university getting a degree they will never use. However, to say all companies that are investing a lot of capital into growth right now shouldn't be, would be the same as saying all students in university are wasting money on their degree. It just isn't true.

The broad statement that you must generate GAAP profits to be a value creating company is wrong and has created a massive investment opportunity. We believe we will harvest the rewards of understanding the underlying economics of our companies over the next few years as they continue to compound capital at exceptional rates.

When we tally up the three narratives, we conclude that the aggressive sell off in growth-oriented companies over the last 3 months is not based on facts and logic. They are based on emotion and fear. *This is the hallmark of a great buying opportunity.*

Now let's talk about two of our largest holdings in the fund.

Smartsheet (SMAR) is the leading software provider in the nascent collaborative work management (CWM) space. The CWM market consists of software vendors offering task-driven online workspaces that support business users in work planning and execution. They combine task, project, workflow, and automation capabilities with conversations, content publishing, reporting, analytics, and dashboards.

CWM is a relatively new market, as most business users have used a mix between email, excel and word documents to manage their workflow, creating a large white space opportunity. There are over 1.2 billion knowledge workers in the world, and we estimate under 20 million today pay for a collaborative work management solution. Given how early this market is in its maturation, Smartsheet is investing aggressively and generating substantial returns from those investments. For every dollar that Smartsheet spends in sales and marketing, they get a return of ~$13 in contribution profit over the expected life of the client. The payback period on this dollar of investment is about 1.5-2 years. Since the returns on investment are strong, they have consistently reinvested all their profit back into the business which has driven ~50% annual revenue growth for the last 10 years.

Smartsheet Unit Economics	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Subscription Revenue	$1,000	$1,300	$1,690	$2,197	$2,856	$3,713	$4,827	$6,275	$8,157
Annual Net Dollar Retention	130%	130%	130%	130%	130%	130%	130%	130%	130%
Subscription Contribution Margin	60%	60%	60%	60%	60%	60%	60%	60%	60%
Subscription Contribution Profit	$600	$780	$1,014	$1,318	$1,714	$2,228	$2,896	$3,765	$4,894
Customer Acquisition Cost	**-$1,400**								
Internal Rate of Return	**126%**								

Source: Optimist Fund Estimates

Today we believe Smartsheet has embedded free cash flow (free cash flow excluding growth investments) generation of around $240 million that is compounding at 40%+, while the current enterprise value of the company is $3.6B. We believe the business can continue to grow over 30% for the next 5 years which results in a calendar 2027 revenue base of ~$3.5 billion, over $1 billion in embedded free cash flow generation, and over $500 million in free cash flow (operating cash flow minus capital expenditures) that they can use for M&A, or capital returns to shareholders.

Finally, Smartsheet is led by a great CEO, Mark Mader, who was the company's first CEO, joining in 2006. Mark cares deeply about Smartsheet, owns around 1.5% of the company, and has proven himself as a strong operator over the last 4 years since Smartsheet's IPO.

Today Smartsheet is cheaper than it has ever been since becoming a public company. Applying a 20x EV/embedded 2027 free cash flow multiple would imply a target price of $190 and a 45% 5-year IRR from todays price of $32. The opportunity exists due to the market narratives we discussed previously.

If accounting allowed for capitalization of all growth costs like a high growth retailer does when they invest in new stores, Smartsheet would be trading at 10x-15x 2023 earnings, growing earnings over 40%, and presumably many more would agree it is a highly economic business.

Next let's shift gears from a cash flow breakeven high growth software company to a programmatic M&A machine.

Focus Financial Partners (FOCS) is the leading RIA (Registered Investment Advisor) consolidator in the United States. The co-founders, Rudy Adolf, Regini Sundar Kodialam, and Leonard Chang officially got together in 2006 and started the Focus Financial Partners acquisition strategy. Their core principle was that independence and entrepreneurship in the wealth management sector are critical to long term success. "Never turn an entrepreneur into an employee" they like to say. The model has been a hit with RIA's where they sell around half their business (often addressing a succession issue in the firm) for a mid to high single digit EBITDA multiple while the firm retains its independent brand and management. The partner firm gains the expertise and backing of the Focus Financial platform that can aid in accelerating growth or if they prefer, they can be left alone to continue business as usual. The choice is left to the RIA.

Not only does the partnership work for RIA's, but it has been lucrative for Focus Financial Partners equity holders as well. Since 2006 they have grown revenue and profits at over 30% annually and on average have generated over a 25% IRR on acquisitions. The model is a win/win for all parties.

The growth story remains far from over. The company continues to target 20%+ annual bottom line growth for the next 3 years, and given they currently only have a mid single digit percentage share of the US RIA industry, we believe the business has atleast a decade of double-digit growth.

Since management has taken the company public in 2018, they have executed extremely well, consistently beating expectations and sticking to their knitting. With this being said, the stock is lower today than it was 4 years ago, yet earnings have grown 125%. Management has over $100 million in equity in the business and is extremely motivated to keep the Focus Financial M&A machine rolling.

We believe that in 5 years Focus will be generating $12-14 in EPS and will trade at atleast a 20x earnings multiple implying a ~$260 target price. At quarter end Focus Financials' share price was ~$34. This implies a 5-year internal rate of return (IRR) of 50%, a very robust return profile.

The company will be facing two headwinds for the remainder of the year. The first is from the correction in equity and bond markets, as 75% of their revenue is linked to asset levels. The second is interest rate increases given 2/3rd of their debt is variable rate. Overall, we believe this will be a one-time growth headwind of 15%-20%, so instead of 6x 2023 EPS, it might be 7.5x 2023 EPS if asset levels and interest rates remain here for the next 18 months. Nevertheless, the multi year EPS compounding should remain over 20%, driving strong returns for shareholders.

Notable Q2 Detractors

Two of our largest detractors in the quarter were Carvana and Wayfair which were down a sobering 81% and 61%. Throughout the quarter we opportunistically added to these positions as they sold off. Though painful in the short term, we believe they will be two of our best investments over the next few years.

Why do we own Carvana?

Carvana (CVNA) is the leading online car dealer in the United States. Since 2012, Carvana has gone from selling zero cars, to being the second largest used car dealer in the US. Today their sights are set on becoming the largest and most profitable used car dealer in the next decade, surpassing the current market leader CarMax. Currently they sell close to 500k retail cars. The long-term goal is to sell 3.2+ million retail cars which would translate into roughly $8 billion in annual free cash flow generation. This compares to their current market cap of ~$4 billion which is down from a $60 billion valuation in the summer of 2021.

We believe Carvana is a proven profitable business model that has been redeploying all their capital into growth to become an industry giant. This investment posture has resulted in many skeptics who think what they are doing is irrational and does not make sense. We disagree.

What have been the recent struggles that have driven the markets loss of confidence in Carvana?

In the last 6 months Carvana has encountered several negative macro factors and operational hiccups that produced subpar performance at a time when the market has become averse to growth-oriented companies. This has created a perfect storm which caused the stock to decline 81% this quarter. We believe the issues that happened are well on their way to being addressed.

On February 24th, a few days before Russia invaded Ukraine, Carvana announced a $2.2B acquisition of ADESA auctions that they would finance with debt. The acquisition gave them significant land and physical assets that will help them reach their goal of selling millions of used cars per year.

Two months later they reported Q1 results that were significantly below analyst estimates due to several factors.

1. Lower profits generated from selling auto loans that they originated in a lower interest rate environment
2. Weaker used car market than anticipated resulted in selling less cars
3. Logistics bottlenecks that have impacted delivery times which lowered sales conversion

Since Carvana invests 6-12 months ahead of demand, if they planned to grow units 50% and they grow 14%, they have over hired and overspent for the current demand environment. This resulted in significantly higher losses in the period than anticipated and roughly -$650 million in free cash flow. At the same time, they announced they would raise an incremental $1 billion in equity to ensure they have enough capital to weather any potential market downturn that might occur.

Given Q1 execution was weaker, and investor sentiment had become increasingly fearful since the war in Ukraine further exacerbated the inflation issue, the cost of financing the ADESA acquisition ended up quite a bit higher than anticipated. When it was all said and done the cost of debt was 10.25%.

Even though the cost of financing was higher than expected they still went forward with the ADESA acquisition because they believe it is in an important asset that will allow them to sell millions of units and generate billions in free cash flow in the future. If the interest rate was 6% or 10%, the deal makes economic sense.

Post-closing the deal, Carvana announced that due to the slowing of the used car environment they would focus on right sizing their expenses to the lowered revenue run rate they expect in 2022. They let go of 12% of their workforce and designed a clear plan to get close to EBITDA (earnings before interest taxes depreciation and amortization) breakeven by Q4 and net income profitable within the next 2 years. After the capital raises and closing of the ADESA acquisition, Carvana has ~$5 billion in liquidity which is more than twice the amount of capital we think they need until hitting the free cash flow breakeven mark.

So, what gives us confidence that Carvana will be able to become sustainably free cash flow positive in the next 18 months?

1. The business model is proven. In their two oldest cohorts (markets that they opened in 2013 and 2014) Carvana already had over 4% EBITDA margins while they continue to grow revenue over 20%. This is while focusing their efforts on building scale, versus operating expense efficiency. Also, 5 out of their 9 cohorts are EBITDA positive. As markets age they become more and more profitable.
2. The headwinds the business faced in Q1 are transitory in nature. A substantial portion of the losses in Q1 were driven by expecting more growth compared to what ultimately happened. Now as they shift their focus to reaching breakeven over generating growth, we believe there is a higher probability that they grow even slower and become profitable sooner, versus grow faster and do not reach profitability in the next two years.
3. Company execution since going public (other than in Q1 2022) has been exceptional. They have consistently laid out detailed targets, how they plan to achieve them, and followed up by beating those targets.
4. Insiders are aligned owning over 40% of the company and having bought over

$400 million in stock in the last 4 months.

We believe that the business will get back on its footing over the next 18 months and drive a material rerating in the shares. Once profitability is reached, we believe focus will shift back towards their goal of selling 3.2 million units which if achieved can result in a business valued at $100 billion over the next 5-10 years.

We will keep you abreast of developments at Carvana over the next few quarters.

Why do we own Wayfair?

Wayfair (W) is the leading online retailer for all things home in the US and an emerging leader in Europe. The company has been and remains highly ambitious, reinvesting nearly 100% of profits back into the company since founding 20 years ago. Their goal is to build the largest home retailer in the world. Over the next 10 years management believes they have the potential to 8x revenue and drive 10%+ EBITDA margins, which would result in a business generating around $10 billion in free cash flow in 2031, versus their current market cap of ~$5 billion.

The business is founder led with both founders owning a combined 25% of the company. They are exceptional capital allocators. Their home furnishing addressable market is ~$800 billion that is highly fragmented. This fragmentation creates a significant opportunity for Wayfair to disproportionally gain share as the market continues to grow from 20% online penetration today to over 40% in the next 10 years.

Wayfair differentiates from its peers on merchandising, selection, service, convenience, and brand. This differentiation is what has allowed the business to go from $500 million in sales in 2011 to over $13 billion today. Most importantly this sales growth has been achieved in an economic manner. The business has attractive one-year paybacks on customer acquisition spend which has hidden profits from their stable long term customer cohorts. On top of that, they have aggressively invested in technology and logistics which are investments we believe the company is still in the first inning of reaping the benefit from. Wayfair is currently trading at 5x embedded free cash flow creating an asymmetric investment opportunity.

COVID re-opening headwinds have parlayed into macro headwinds

Since last summer, Wayfair has been impacted by re-opening headwinds and supply chain disruptions that resulted in a decline in year over year revenue and market share for the last 4 quarters. As we were just about to finish cycling through the tough covid comparisons, macro headwinds have emerged as consumers have incrementally been pulling back on spending due to inflation and recession fears. This has tempered Wayfair's expectation for near term growth. Even with these incremental headwinds we believe market share gains will accelerate over the next three quarters of 2022 and the business will return to robust top line growth and profitability in 2023.

We believe the return to robust topline growth and profitability over the next 18 months will drive a significant re-rating in the share price. Over the next 5 years we believe a $700 share price is well within reach (versus the current price of ~$43). Due to the attractiveness of the investment, we increased our position in the quarter.

Closing Remarks

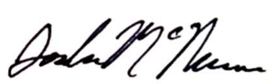
On a go forward basis, we plan to communicate through our quarterly letters as well as through ad hoc blog posts on Optimistfund.com. This could be a thesis, an update on an Optimist Fund holding, or a thought piece that we feel is worth sharing. Stay tuned.

We are always open to speaking about specific holdings in the fund with current or perspective investors. Please don't hesitate to reach out.

Lastly, thank you to all Optimist Fund investors who came aboard since launching on March 1. Though we are off to a rough start, we believe the fund is currently a coiled spring. We don't know exactly when it will release, but when it does, it will be very rewarding for Optimist Fund investors.

Speak soon,

Jordan McNamee



Founder & Chief Investment Officer

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**The Benchmark has a 50% weighting in the MSCI World Growth Index and a 50% weighting in the Russell Midcap Growth Index. The Benchmark is provided for information only and comparisons to benchmarks and indexes have limitations. Investing in global equities is the primary strategy for Optimist Fund but Optimist Fund does not invest in all or necessarily any of the securities that compose the Benchmark or the market indexes. Reference to the Benchmark and the market indexes does not imply that Optimist Fund will achieve similar returns.

Appendix – How the economics of a business can be understated in the income statement

When a software company sells a one-year contract it is typically billed upfront for usage throughout the entire year. Revenue recognition policies are to recognize that revenue evenly over the length of the contract, even though the cash was collected at the beginning of the year.

Assumptions

Software Contract Length	**1 Year**
Annual Contract Value	**$120**

Signed 1 contract on January 1st

2022	Q1	Q2	Q3	Q4	Full Year
Billings	$120	$0	$0	$0	$120
Revenue	$30	$30	$30	$30	$120
Current Asset					
Cash	$120	$120	$120	$120	
Current Liability					
Deferred Revenue	$90	$60	$30	$0	

As you can see in the above example this company signed a contract on January 1st and billed for the entire $120 annual contract value which they collected immediately. In each quarter 25% of the annual contract value was recognized as revenue. For a business that is not growing, billings and revenue on a full year basis is the same. For a subscription business with upfront billing that is growing, there are important financial implications.

Assumptions

Software Contract Length **1 Year**

Annual Contract Value **$120**

Signed 1 contract on January 1st and 1 contract on September 30th

2022	Q1	Q2	Q3	Q4	Full Year
Billings	$120	$0	$120	$0	$240
Revenue	$30	$30	$30	$60	$150
Current Asset					
Cash	$120	$120	$240	$240	
Current Liability					
Deferred Revenue	$90	$60	$150	$90	

In the above example the company signed another $120 contract that they collected upfront. Since the contract was signed with 3 months left in the year only $30 is recognized on the 2022 income statement while the remaining $90 dollars will be recognized in the follower year. When a business is growing, billings is a much better indicator of the economics of a subscription business than revenue.

Now lets layer in costs and build off the above example.

Assumptions

Software Contract Length	**1 Year**	
Annual Contract Value	**$120**	

Signed 1 contract on January 1st and 1 contract on September 30th

New Business Commission	**20% of Annual Contract Value**
Cost to Serve a Customer	**33% of Annual Contract Value**

2022	Q1	Q2	Q3	Q4	Full Year
Billings	$120	$0	$120	$0	$240
Revenue	$30	$30	$30	$60	$150
Maintenance Costs	$10	$10	$10	$20	$50
Growth Costs	$24	$0	$24	$0	$48
Total Costs	$34	$10	$34	$20	$98
Operating Income	**-$4**	**$20**	**-$4**	**$40**	**$52**
Pre Tax Free Cash Flow					**$142**

We added an assumption that the operating cost to serve a customer is 33% of their annual contract value and that this theoretical business pays a 20% commission on new annual contract value signed. As you can see $34 is spent in Q1, $10 to serve the customer and $24 as a commission to the salesperson for winning the contract. This results in the business making $52 in operating profit and $142 in free cash flow in 2022. The delta in operating income and free cash flow is the difference between billings and revenue. Now if we assume this business keeps both customers but does not sign any new customers the following year, the below is what their income statement would look like.

Assumptions

Software Contract Length	**1 Year**
Annual Contract Value	**$120**

Renewed 1 contract on January 1st, 1 contract on September 30th

New Business Commission	**20% of Annual Contract Value**
Cost to Serve a Customer	**33% of Annual Contract Value**

2023	Q1	Q2	Q3	Q4	Full Year
Billings	$120	$0	$120	$0	$240
Revenue	$60	$60	$60	$60	$240
Maintenance Costs	$20	$20	$20	$20	$80
Growth Costs	$0	$0	$0	$0	$0
Total Costs	$20	$20	$20	$20	$80
Operating Income	**$40**	**$40**	**$40**	**$40**	**$160**
Pre Tax Free Cash Flow					**$160**

Operating income materially increases from $52 in 2022 to $160 in 2023 even though they did nothing but serve the customers they signed in the year prior. The drivers of the operating income improvement were from:

1. Unearned revenue converted to earned revenue
2. Zero growth cost because they didn't win any new customers so did not pay new business commissions.

As you can see free cash flow was a leading indicator of income statement profits because it is immediately impacted by billings, whereas revenue is a lagging indicator.

Let's now create an example where suddenly this business takes off in Q4 and they sign 10 new contracts on Dec 31st.

Assumptions

Software Contract Length	**1 Year**
Annual Contract Value	**$120**

Renewed 1 contract on January 1st, 1 contract on September 30th and sign 10 new contracts on Dec 31st

New Business Commission	**20% of Annual Contract Value**
Cost to Serve a Customer	**33% of Annual Contract Value**

2023	Q1	Q2	Q3	Q4	Full Year
Billings	$120	$0	$120	$1,200	$1,440
Revenue	$60	$60	$60	$60	$240
Maintenance Costs	$20	$20	$20	$20	$80
Growth Costs	$0	$0	$0	$240	$240
Total Costs	$20	$20	$20	$260	$320
Operating Income	**$40**	**$40**	**$40**	**-$200**	**-$80**
Pre Tax Free Cash Flow					**$1,120**

Given the step up in new business activity in Q4, an increase in commissions was paid out without the corresponding revenue, which created an operating loss for the full year. The business accelerated meaningfully, increasing their customer base five-fold but the operating income loss in the period exploded to -$200. If they signed zero new business the following year, operating income in 2024 would be $960. However, if they have an even better Q4 next year and gain 100 new customers, they will be loss making again even though the underlying earnings of the company continues to grow.

Many high growth software companies technically lose money according to their GAAP income statement because of this dynamic but are creating value and could be wildly profitable if they stopped growing.